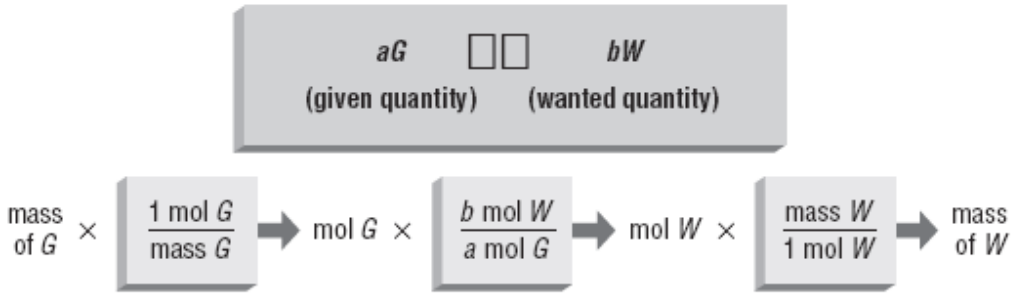
Unit Five Test Ch 8 P 213-251 (omit p 234-236) and Ch 12 p 353-383 Name:

Covalent bond, diatomic, comparison of melting and boiling points of ionic and molecular compounds, drawing molecules using molecular formula, Lewis electron dot diagrams to show covalent bonds, single, double, triple bonds, structural formulas, shared pairs(bonding pairs) of electrons, unshared pair(lone pair or bonding pair) of electrons, number of bonds using charge, coordinate covalent bond, polyatomic ion(lewis dot diagram/structural diagram), Resonance structure of ozone, exceptions to octet rule, sigma bond, pi bond, VSEPR→ Linear, Bent, Trigonal planar, pyramidal, tetrahedral, trigonal bipyramid, octahedral, square planar , t shape,Polarity, Intermolecular forces, van der Waals forces
(dipole and dispersion), hydrogen bonds p 247 Do 39 to 61(omit 55, 56)

Stoichiometry(p 354), steps for calculating various stoichiometry calculations, mass conservation in a chemical reaction, mole ratio, mass→mass stoichiometry, , mol↔mol, Vol↔Vol,(will be done with unit 6) limiting reagent, excess reagent, percent yield
P 379 Do 36 to



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$N_2(g)$	+ $3H_2(g)$	→ $2NH_3(g)$
☐ atoms N	+ 6 atoms H	→ ☐ atoms N and ☐ atoms H
1 molecule N_2	+ ☐ molecules H_2	→ ☐ molecules NH_3
☐ × (6.02×10^{23} molecules N_2)	+ 3 × (6.02×10^{23} molecules H_2)	→ ☐ × (6.02×10^{23} molecules NH_3)
1 mol N_2	+ ☐ mol H_2	→ 2 mol NH_3
28 g N_2	+ 3 × ☐ g H_2	→ 2 × ☐ g NH_3
	☐ g reactants	→ 34 g products
Assume STP 22.4 L N_2	+ 67.2 L H_2	→ ☐ L NH_3

Reading Skill Practice

Sometimes information you read is easier to remember if you write it in a different format. For example, the paragraph on page 363 and Figure 12.8 both explain how to solve stoichiometric problems. Use these explanations to make a diagram or flow chart for solving a particle–mass stoichiometry problem. Do your work on a separate sheet of paper.